

### REMARKS

This Application has been carefully reviewed in light of the Office Action mailed December 16, 2004. At the time of the Office Action, Claims 12-26 were pending in this Application. Claims 1-11 were previously cancelled by Applicants without prejudice or disclaimer. Claims 12-26 were rejected. Applicants respectfully request reconsideration and favorable action in this case.

#### **Rejections under 35 U.S.C. §103**

Claims 12-24 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,330,510 issued to Yutaka Takaku et al. ("Takaku et al.") in view of Applicants admitted prior art or alternatively over U.S. Patent 6,257,197 issued to Hirofumi Nishimura et al. ("Nishimura et al.") in view of Applicants admitted prior art. Applicants respectfully traverse and submit the cited art combination, even if proper, which Applicants do not concede, does not render the claimed embodiments of the invention obvious.

Claims 25 and 26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Takaku et al. in view of Applicants admitted prior art, and further in view of U.S. Patent 5,878,712 issued to Peter Wolters et al. ("Wolters et al.") or U.S. Patent 6,705,280 issued to Eduard Lippert ("Lippert"). Applicants respectfully traverse and submit the cited art combination, even if proper, which Applicants do not concede, does not render the claimed embodiments of the invention obvious.

Claims 25 and 26 were also rejected under 35 U.S.C. §103(a) as being unpatentable over Nishimura et al. in view of Applicants admitted prior art, and further in view of Wolters et al. or Lippert. Applicants respectfully traverse and submit the cited art combination, even if proper, which Applicants do not concede, does not render the claimed embodiments of the invention obvious.

In order to establish a *prima facie* case of obviousness, the references cited by the Examiner must disclose all claimed limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). Furthermore, according to § 2143 of the Manual of Patent Examining

Procedure, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

Here, a *prima facie* case of obviousness has not been established because the cited art combinations do not teach all of the limitations of the presently claimed embodiments of the invention. For example, the presently claimed embodiments of the invention are directed to, *inter alia*, an "inlet passage . . . to provide swirl in incoming gas, wherein said swirl has an axis substantially traverse to said piston axis." The Examiner cites Takaku et al. and Applicant's admitted prior art at page 3, paragraph 9, of the present application as rendering the claimed embodiment obvious. The Examiner admits Takaku et al. does not teach the use of internal EGR but submits, based on Applicant's comments at paragraph 9 of page 3, that the use of internal and external EGR is well known. A review of page 3, paragraph 9, of Applicant's specification reveals the following is stated:

For mixture formation in these [prior art] internal combustion engines, a swirl concept is used for charging, in which a rotational movement is imparted to the drawn-in gases in the cylinder, the axis of rotation running approximately parallel to the piston movement/cylinder axis.

(emphasis added) [bracketed information added].

Since Takaku et al. admittedly teach nothing in relation to internal EGR, the Examiner's rejection rests on Applicant's specification with regard to internal EGR. The presently claimed embodiments are directed to an "inlet passage" configured to swirl the incoming gas wherein the swirl has an "axis substantially traverse to said piston axis," and "in combination with a charging movement of the piston, causes an intermixture of residual exhaust gas with said incoming gas." Neither Takaku et al. nor Applicant's specification

disclose the above-quoted claimed subject matter. Consequently, Applicants respectfully request withdrawal of the rejection and favorable action.

In relation to the Examiner's rejection based on Nishimura et al. and Applicant's specification, Applicant directs the Examiner's attention to the above comments regarding the lack of teaching of the references in relation to a "swirl" having "an axis substantially traverse to said piston axis." Withdrawal of the rejection, for the same reasons noted above, is respectfully requested.

**Change of Correspondence Address**

Applicants respectfully request that all papers pertaining to the above-captioned patent application be directed to Customer No. 31625 and all telephone calls should be directed to Bruce W. Slayden II at 512.322.2606. Applicants also enclose a Change of Correspondence Address for the U.S. Patent and Trademark Office records.

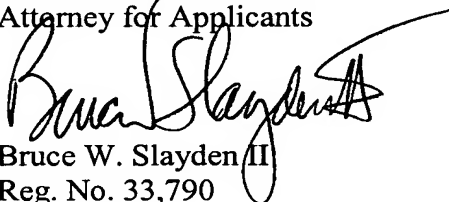
**CONCLUSION**

Applicants have now made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. Applicants respectfully request reconsideration of the claims as amended.

Applicants believe there are no fees due at this time, however, the Commissioner is hereby authorized to charge any fees necessary or credit any overpayment to Deposit Account No. 50-2148 of Baker Botts L.L.P.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicant's attorney at 512.322.2606.

Respectfully submitted,  
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